

3.2.2.1 Completing a Paper Traffic Report/Chain-of-Custody (TR) Form

The sampler must accurately complete the appropriate sections of the TR to provide important information about the samples and indicate the type of analysis to be performed. Certain sections of the TR are not the sampler's responsibility to complete (they are the responsibility of the laboratory). Samplers should note that the TR is a multi-layer, color-coded form.

The Organic TR contains the following four layers:

- Blue - Copy you will send to the Region;
- Pink - Copy you will send to CLP SMO;
- White - Copy you will enclose within the sample cooler sent to the laboratory; and
- Yellow - A second copy you will enclose within the sample cooler sent to the laboratory.

The Inorganic TR contains the following four layers:

- Green - Copy you will send to the Region;
- Pink - Copy you will return to CLP SMO (referred to as Contract Laboratory Analytical Support Services [CLASS] on the form);
- White - Copy you will enclose within the sample cooler sent to the laboratory; and
- Yellow - A second copy you will enclose within the sample cooler sent to the laboratory.

Samplers must seal the white and yellow copies of the TR within a plastic bag or pouch (along with a return address and method for returning the cooler), tape the bag inside the lid of the sample cooler, and submit the paperwork to the laboratory. Samplers must mail the pink copy of the TR to CLP SMO within five days of sample shipment to the laboratory. It is strongly recommended that the sampler keep a xeroxed copy of the TR in the event of questions later on.

The **sampler(s)** must enter the following information on the TR:

- Case number;
- Project code and account code, if assigned by Region;
- Indication if this is a non-Superfund Program (if applicable).
- Site name;
- City and state;
- Site Spill ID;
- Region number;
- Sampling company name;
- Sampler name and signature;
- Purpose (Lead, Early Action, or Long-Term Action);

- Date Shipped, carrier name, and airbill number;
- Name and shipping address of the laboratory;
- Any additional sampler signatures, as necessary; and
- Chain-of-Custody Seal number(s), if they appear on the custody seal.

A detailed set of instructions for completing an Organic TR is included in Table 3-6. Instructions for completing an Inorganic TR are included in Table 3-7. Samplers should note that the back of both the Organic and Inorganic TR contains instructions and information to aid in the completion and submission of the TR. The TR may also contain handwritten notations made by the sampler across the top of the form. These notations may be made in the event of multiple turnaround dates or a request for Preliminary Results. If a Region schedules a Case requiring Preliminary Results and/or multiple turnaround times, the sampler will make notes on the top of the TR and use an asterisk to mark the sample containing the Preliminary Results. If the sampler omits the turnaround time from the TR, the laboratory will refer to the turnaround time specified on the CLP Scheduling Notification Form provided by CLP SMO for the Case.

Table 3-6. Completing an Organic Traffic Report (TR)		
Step	Action	Special Notes
1	Record the Case number that was assigned to the sampling event in the box located in the upper right corner of the form.	
2	In Box #1, enter any project and account codes that may be Regionally assigned. Enter site-specific information such as site name, city, state, and the Site Spill ID number (as assigned by the Region). In the Op Unit area, enter the Operational Unit number that may be assigned at the site to designate internal site operational units of the sampling event.	<p>The project and account code numbers are not CLP-required, but are used as a convenience by the Region. Contact your RSCC to see if your Region uses these codes. The Operational Unit number is also not CLP-required, but may be assigned and used internally at the site. It usually appears in the format "OU-X" where X is a number (e.g., OU-1 or OU-2, etc.)</p> <p>This section of the form is de-sensitized and will not copy onto the laboratory copy of the TR.</p>
3	In Box #2, record the Region number and enter the name of your sampling company. Print your name and include your signature in the adjacent space.	Additional space for sampler signatures is provided in a separate area of the TR.

Table 3-6. Completing an Organic Traffic Report (TR) Cont.

Step	Action	Special Notes
4	In Box #3, place a check mark in the appropriate box for funding lead under the column labeled "Lead". Place a check mark in the appropriate column to indicate if this is an "Early Action" or "Long-Term Action" sampling effort.	<p>Funding lead is defined as:</p> <p>SF Superfund PRP Potentially Responsible Party ST State FED Federal</p> <p>Early Action is defined as:</p> <p>CLEM Classic Emergency PA Preliminary Assessment REM Removal RI Remedial Investigation SI Site Inspection ESI Expanded Site Inspection</p> <p>Long-Term Action is defined as:</p> <p>FS Feasibility Study RD Remedial Design RA Remedial Action O&M Operations and Maintenance NPLD National Priorities List Delete</p>
5	In Box #4, record the date shipped, the carrier name (e.g., Federal Express, Purolator, or Airborne), and enter the airbill number.	
6	In Box #5, record the name and full address of the contract laboratory to which the samples will be shipped. In the ATTN: area, enter the name of the sample custodian or CLP contact.	If the contact name is unknown, write "CLP Sample Custodian".
7	In the first column (CLP Sample Numbers from labels), enter the five-character CLP sample number exactly as it is listed on the pre-printed sample label(s).	Do NOT add any hyphens, extra zeroes, or digits.
8	<p>In Column A (Matrix), record the appropriate matrix code using the codes provided in a boxed area on the TR.</p> <p>If the Region is shipping a QC sample such as a field blank, coolant blank, trip blank, spike, duplicate, or Performance Evaluation (PE) sample, write "Field QC" as the matrix for that sample.</p> <p>If the Region wishes to keep the QC sample "blind" to the laboratory (the recommended practice), the sampler should enter either "1", "2", or "3" for water QC samples, or "5" for soil/sediment QC samples as the matrix code in the Matrix column of the TR.</p>	<p>Matrix codes are listed in Box #6 on the Organic TR.</p> <p>Surface waters, ground waters, leachates, rinsates, soils and sediments are differentiated for database purposes. For the purposes of QC frequency, surface waters, ground waters, leachates, and rinsates are the same matrix: WATER. Soil and sediment samples are the same matrix: SOIL.</p> <p>Field Blanks are NOT to be used for QC purposes. If all water samples are rinsates, no QC is to be performed.</p>
9	In Column B (Concentration), enter the estimated sample concentration.	Enter "L" for low/medium aqueous samples OR low concentration solid samples, or "M" for medium concentration solid samples.
10	In Column C (Sample Type), enter the sample type (Composite or Grab).	
11	In Column D (Preservative), enter the type of preservative using the preservative codes provided in a boxed area of the TR.	Preservative codes are provided in Box #7 on the Organic TR.

Table 3-6. Completing an Organic Traffic Report (TR) Cont.

Step	Action	Special Notes
12	In Column E (Requested Analytical Services [RAS]), place a checkmark next to each fraction to be analyzed. It is not necessary to record the number of sample containers used. Organic fractions include volatiles, semi-volatiles, and Pesticides/Aroclors.	The TR may contain future or recently-discontinued fraction analyses. A checkmark indicates the type of sample analysis required for the analytical fraction(s) in question. Regions may request a 7-, 14-, or 21-day turnaround time for data on a per-fraction basis. Preliminary results are also available within 48 hours for VOA, or 72 hours for BNA and PEST.
13	In Column F (Regional Specific Tracking Number or Tag Numbers), enter the Region-specific tracking numbers or tag numbers designated by the RSCC. If possible, all tag numbers for each CLP sample should be on one line.	If several tags with consecutive numbers are used for one sample, the first number must be completely entered. Remaining tag numbers in the sequence can be represented by including only those numbers that are unique (separated by commas) or by listing the first and last numbers of the sequence, separated by a dash (e.g., xx - xxx). The TR form entries should indicate which tag number corresponds to which fraction.
14	In Column G (Station Location Identifier), enter the station location number. Refer to Section 2.4.1 when taking composite samples.	Using a station location identifier may make field QC samples (e.g., duplicates) non-blind to the laboratory.
15	In Column H (Month/Day/Year/Time of Sample Collection) enter the month, day, year, and time in military style (e.g., 4:00 PM = 1600 hours) of the sample collection.	Entering this information may make field QC samples (e.g., duplicates) non-blind to the laboratory.
16	In Column I (Corresponding CLP Inorganic Sample Number), enter the corresponding inorganic CLP sample number, if applicable.	
17	In Column J (Sampler Initials) enter your initials.	
18	In Column K (Field QC Qualifier), indicate the Field QC Qualifier. Refer to Table 3-1 for information regarding the type and purpose of QC samples. On the organic TR only, enter a dash if this is not a QC sample. Note: Depending on Regional guidance, this column may be left blank for all samples except PE samples and Field Blanks.	Field QC Qualifiers are defined as follows: B = Blank S = Field Spikes ONLY * D = Field Duplicate R = Rinsate PE = Performance Evaluation * Do NOT mark with an "S" for laboratory matrix spikes or spike duplicates. Only use the "S" designation for field spikes. Samplers must indicate when a sample is a duplicate sample. For example, you would list both the original sample and the duplicate sample as follows: C01M2 D / C01M2
19	In the Shipment for Case Complete (Y/N) area, indicate if the shipment for the Case is complete.	The sampler records the status of each Case. "Y" designates that the Case will be complete after that shipment. "N" indicates the Case has not yet completed shipment. If multiple coolers are used for one shipment, samplers should still mark the shipment with a "Y" for being complete on each TR in each cooler being used.
20	In the Page ___ of ___ area, indicate what page of the total TR paperwork this particular form represents.	Samples should use this area to indicate that multiple TR forms were used to record the information for one SDG.

Table 3-6. Completing an Organic Traffic Report (TR) Cont.

Step	Action	Special Notes
21	In the VOA MS/MSD Required (Y/N) area, indicate if a VOA MS/MSD is required and the sample number for which it is required.	"Y" designates that a VOA MS/MSD is required. "N" indicates that a VOA MS/MSD is not required.
22	In the BNA MS/MSD Required (Y/N) area, indicate if a Base Neutral Acid (BNA) MS/MSD is required and the sample number for which it is required.	"Y" designates that a BNA MS/MSD is required. "N" indicates that a BNA MS/MSD is not required.
23	In the Pest/PCB MS/MSD Required (Y/N) area, indicate if a Pesticide/Polychlorinated Biphenyl (Pest/PCB) MS/MSD is required and the sample number for which it is required.	"Y" designates that a Pest/PCB MS/MSD is required. "N" indicates that a Pest/PCB MS/MSD is not required.
24	In the Additional Sampler Signatures area, have any samplers who assisted you with collecting samples for the SDG sign their names.	
25	In the Chain-of-Custody Seal Number(s) area, record the number printed on the Chain-of-Custody seal, as applicable.	Depending on the type of custody seal used, there may or may not be a recordable number.
26	Once you have packaged the sample(s) and prepared them for shipment, sign your name in the Relinquished By area and record the date and time of signature in the Date/Time area in the Chain-of-Custody Record section of the TR.	

Note: Samplers should put a slash through any box that is not applicable and, therefore, is not being used on a TR. Boxes should not be left blank.

Table 3-7. Completing an Inorganic Traffic Report (TR)

Step	Action	Special Notes
1	Record the Case Number that was assigned to the sampling event in the upper right corner of the form.	
2	In Box #1 (Project Code) and Box #2 (Account Code), enter any project and account codes that may be Regionally-assigned. Enter site-specific information such as site name, city, state, and the Site Spill ID number (as assigned by the Region), and indicate if this is a non-Superfund Program activity, if applicable.	<p>The project and account code numbers are not CLP-required, but are used as a convenience by the Region. Contact your RSCC to see if your Region uses these codes.</p> <p>This section of the form is de-sensitized and will not copy onto the laboratory copy of the TR.</p>
3	In Box #3 (Region Number), record the Region number and enter the name of your sampling company. Print your name and include your signature in the adjacent space.	Additional space for sampler signatures is provided in a separate area of the TR.
4	In Box #4 (Purpose), place a check mark in the appropriate box for funding lead under the column labeled "Lead".	<p>Funding lead is defined as:</p> <p>SF Superfund PRP Potentially Responsible Party ST State FED Federal</p>
5	In Box #4 (Purpose), place a check mark in the appropriate column to indicate if this is an "Early Action" or "Long-Term Action" sampling effort.	<p>Early Action is defined as:</p> <p>CLEM Classic Emergency PA Preliminary Assessment REM Removal RI Remedial Investigation SI Site Inspection ESI Expanded Site Inspection</p> <p>Long-term action is defined as:</p> <p>FS Feasibility Study RD Remedial Design RA Remedial Action O&M Operations and Maintenance NPLD National Priorities List Delete</p>
6	In Box #5 (Date Shipped/Carrier/Airbill Number) record the date shipped, the carrier name (e.g., Federal Express, Purolator, or Airborne), and enter the airbill number.	
7	In Box #6 (Ship To:), record the name and full address of the contract laboratory to which the samples will be shipped. In the ATTN: area, enter the name of the sample custodian or CLP contact.	If the contact name is unknown, write "CLP Sample Custodian".
8	In the first column, enter the six-character CLP sample number exactly as it is listed on the pre-printed sample label(s).	Do NOT add any hyphens, extra zeroes, or digits.
9	<p>In Column A (Matrix), record the appropriate matrix code using the codes provided in a boxed area on the TR.</p> <p>If the Region is shipping a QC sample such as a field blank, coolant blank, trip blank, spike, duplicate, or Performance Evaluation (PE) sample, write "Field QC" as the matrix for that sample.</p> <p>If the Region wishes to keep the QC sample "blind" to the laboratory (the recommended practice), the sampler should enter either "1", "2", or "3" for water QC samples, or "5" for soil/sediment QC samples as the matrix code in the Matrix column of the TR.</p>	<p>Matrix codes are listed in Box #7 on the Inorganic TR.</p> <p>On an Inorganic TR: Surface waters, ground waters, leachates, rinsates, soils/sediments, oils, and waste are differentiated for database purposes only. For the purposes of QC frequency, surface waters, ground waters, leachates, and rinsates are the same matrix: WATER. Soil and sediment samples are the same matrix: SOIL.</p> <p>Field Blanks are NOT to be used for QC purposes. If all water samples are rinsates, no QC is to be performed (e.g., laboratory duplicate or spike analysis).</p>

Table 3-7. Completing an Inorganic Traffic Report (TR) Cont.

Step	Action	Special Notes
10	In Column B (Concentration), enter the estimated sample concentration.	Enter "L" for low concentration solid samples, "M" for medium concentration samples, and "H" for high concentration samples. High concentration sample analysis is currently not available.
11	In Column C (Sample Type), enter the sample type (Composite or Grab).	
12	In Column D (Preservative) enter the type of preservative using the preservative codes provided in a boxed area of the TR.	Preservative codes are provided in Box #8 on the Inorganic TR.
13	In Column E (Requested Analytical Services [RAS]), place a check mark next to each fraction to be analyzed. It is not necessary to record the number of sample containers used. Inorganic fractions include dissolved metals, total metals, and cyanide. For each individual inorganic sample, a sampler may request either total metal OR dissolved metal analyses, but not both. This means that samples collected for both total metal and dissolved metal analyses must receive separate, unique sample numbers.	The TR may contain future or recently-discontinued fraction analyses. For an Inorganic TR: A checkmark indicates the type of sample analysis required for the analytical fraction(s) in question. Regions may request 7-, 14, or 21-day turnaround times. Preliminary results are also available within 72 hours.
14	In Column F (Regional Specific Tracking Number or Tag Numbers), enter the Region-specific tracking numbers or tag numbers designated by the RSCC. If possible, list all tag numbers for each CLP sample on one line.	If several tags with consecutive numbers are used for one sample, the first number must be completely entered. Remaining tag numbers in the sequence can be represented by including only those numbers that are unique (separated by commas) or by listing the first and last numbers of the sequence, separated by a dash (e.g., xx - xxx). The TR form entries should indicate which tag number corresponds to which fraction.
15	In Column G (Station Location Identifier), enter the station location number. Refer to Section 2.4.1 when taking composite samples.	Using a station location identifier may make field QC samples (e.g., duplicates) non-blind to the laboratory.
16	In Column H (Month/Day/Year/Time of Sample Collection), enter the month, day, year, and time in military style (e.g., 4:00 PM = 1600 hours) of the sample collection.	Entering this information may make field QC samples (e.g., duplicates) non-blind to the laboratory.
17	In Column I (Corresponding CLP Organic Sample Number), enter the corresponding organic CLP sample number, if applicable.	
18	In Column J (Sampler Initials), enter your initials.	

Table 3-7. Completing an Inorganic Traffic Report (TR) Cont.		
Step	Action	Special Notes
19	In Column K (Field QC Qualifier), indicate the Field QC Qualifier. Refer to Table 3-1 for information regarding the type and purpose of QC samples. Note: Depending on Regional guidance, this column may be left blank for all samples except PE samples and Field Blanks.	Field QC Qualifiers are defined as follows: B = Blank S = Spike (for Field Spikes ONLY) * D = Duplicate R = Rinsate PE = Performance Evaluation — = Not a QC Sample * Do NOT mark with an "S" for laboratory matrix spikes or spike duplicates. Only use the "S" designation for field spikes. Samplers must indicate when a sample is a duplicate sample. For example, you would list both the original sample and the duplicate sample as follows: MC01M2 D / MC01M2
20	In the Shipment for Case Complete (Y/N) area, indicate if the shipment for the Case is complete.	The sampler records the status of each Case. "Y" designates that the Case will be complete after that shipment. "N" indicates the Case has not yet completed shipment. If multiple coolers are used for one shipment, samplers should still mark the shipment with a "Y" for being complete on each TR in each cooler being used.
21	In the Page ___ of ___ area, indicate what page of the total TR paperwork this particular form represents.	Samplers should use this area to indicate that multiple TR forms were used to record the information for one SDG.
22	In the Sample(s) to be Used for Laboratory QC area, indicate the samples to be used for Matrix Spike/laboratory duplicates.	
23	In the Additional Sampler Signatures area, have any samplers who assisted you with collecting samples for the SDG sign their names.	
24	In the Chain-of-Custody Seal Number(s) area, record the number printed on the Chain-of-Custody seal, as applicable.	Depending on the type of custody seal used, there may or may not be a recordable number.
25	Once you have packaged the sample(s) and prepared them for shipment, sign your name in the Relinquished By area and record the date and time of signature in the Date/Time area in the Chain-of-Custody Record section of the TR.	

Note: Samplers should put a slash through any box that is not applicable and, therefore, is not being used on a TR. Boxes should not be left blank.

3.2.2.2 Completing a Traffic Report/Chain-of-Custody (TR) Form Using the Forms II Lite Software

The TR is easily and automatically created by the Field Operations Records Management System (FORMS) II Lite software. A sampler will input the same information into the software program as they would provide on a paper TR (inorganic or organic). The difference between a paper TR and a TR generated electronically using the FORMS II Lite software is that the software will automatically allocate space on the form only to the fields that contain input provided by the sampler. This means that space on the form is re-allocated by the software on an as-needed basis and only the information input by the sampler will display when the TR is printed. The FORMS II Lite software will generate two copies of the TR, one for the laboratory (see Figures 3-4 and 3-5) and one for the Region (see Figures 3-6 and 3-7). The sampler must sign BOTH original copies of the form since they are not carbons like the paper TR. The sampler must then photocopy and distribute copies of these two TRs to all appropriate parties.

As you can see, a TR created using the FORMS II Lite software appears to be different from a traditional paper TR. For example, the same basic header information is contained on both forms, but it appears in a different order on the electronic TR than it does on the paper TR. Also, information a sampler previously could NOT include on a paper TR can easily be included on an electronic TR. For example, not only is the matrix listed on the electronic TR, but the name of the sampler taking that sample can also be entered. The appearance of more space on the electronic TR is a result of the space re-allocation on an as-needed basis. Also, certain information on the paper TR serves only to provide guidance for the sampler, it will not appear on the electronic TR (e.g., matrix and preservative descriptions).

Figure 3-4. An Organic Traffic Report Created Using the FORMS II Lite Software (Laboratory Copy)

USEPA Contract Laboratory Program Organic Traffic Report & Chain of Custody Record							Case No: 99999 DAS No: SDG No:																				
Date Shipped: 04/09/2001 Carrier Name: FedEx Airbill: 41033427144 Shipped to: Organic Lab 999 Route 120 Arlington VA 22044 (999) 555-5555			Chain of Custody Record <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 30%;">Relinquished By</th> <th style="width: 30%;">(Date / Time)</th> <th style="width: 30%;">Received By</th> <th style="width: 30%;">(Date / Time)</th> </tr> <tr><td>1</td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td></tr> </table>			Relinquished By	(Date / Time)	Received By	(Date / Time)	1				2				3				4				For Lab Use Only Lab Contract No: _____ Unit Price: _____ Transfer To: _____ Lab Contract No: _____ Unit Price: _____	
Relinquished By	(Date / Time)	Received By	(Date / Time)																								
1																											
2																											
3																											
4																											
ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt																		
C0100	Surface Soil (0"-6")/ DAN SAMPLER, BOB SAMPLER	/G	Arochlors (7)	31 (Ice Only) (1)	1	S:	04/09/2001 11:05																				
C0101	Surface Soil (0"-6")/ DAN SAMPLER, BOB SAMPLER	/G	Arochlors (7)	32 (Ice Only) (1)	2	S:	04/09/2001 11:20																				
C0102	Surface Soil (0"-6")/ DAN SAMPLER, BOB SAMPLER	/G	Arochlors (7)	33 (Ice Only) (1)	3	S:	04/09/2001 11:30																				
C0103	Sediment/ DAN SAMPLER, BOB SAMPLER	/G	Arochlors (7)	34 (Ice Only) (1)	4	S:	04/09/2001 11:45																				
C0104	Sediment/ DAN SAMPLER	/G	Arochlors (7)	36 (Ice Only) (1)	5	S:	04/09/2001 11:55																				
C0107	Surface Water/ DAN SAMPLER	/G	Arochlors (7)	3133 (Ice Only), 3134 (Ice Only) (2)	1	S:	04/09/2001 10:52																				
C0108	Sediment/ JOE SAMPLER	/G	Arochlors (7)	3135 (Ice Only) (1)	3	S:	04/09/2001 10:51																				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Shipment for Case Complete? <input checked="" type="checkbox"/></td> <td style="width: 25%;">Sample(s) to be used for laboratory QC: C0109</td> <td style="width: 25%;">Additional Sampler Signature(s):</td> <td style="width: 15%;">Cooler Temperature Upon Receipt:</td> <td colspan="2" style="width: 20%;">Chain of Custody Seal Number:</td> </tr> <tr> <td colspan="2"> Analysis Key: Concentration: L = Low, M = Low/Medium, H = High Arochlors = Arochlors, BNA = TCL Semivolatiles, VOA = TCL Volatiles </td> <td colspan="2"> Type/Designate: Composite = C, Grab = G </td> <td colspan="2"> Custody Seal Intact? <input checked="" type="checkbox"/> Shipment Iced? <input checked="" type="checkbox"/> </td> </tr> </table>										Shipment for Case Complete? <input checked="" type="checkbox"/>	Sample(s) to be used for laboratory QC: C0109	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:		Analysis Key: Concentration: L = Low, M = Low/Medium, H = High Arochlors = Arochlors, BNA = TCL Semivolatiles, VOA = TCL Volatiles		Type/Designate: Composite = C, Grab = G		Custody Seal Intact? <input checked="" type="checkbox"/> Shipment Iced? <input checked="" type="checkbox"/>							
Shipment for Case Complete? <input checked="" type="checkbox"/>	Sample(s) to be used for laboratory QC: C0109	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:																							
Analysis Key: Concentration: L = Low, M = Low/Medium, H = High Arochlors = Arochlors, BNA = TCL Semivolatiles, VOA = TCL Volatiles		Type/Designate: Composite = C, Grab = G		Custody Seal Intact? <input checked="" type="checkbox"/> Shipment Iced? <input checked="" type="checkbox"/>																							
TR Number: 3-235781339-040901-0002 <small>PR provides preliminary results. Requests for preliminary results will increase analytical costs. Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222</small>						LABORATORY COPY <small>F2V5.0.66 Page 1 of 3</small>																					

Figure 3-5. An Inorganic Traffic Report Created Using the FORMS II Lite Software (Laboratory Copy)

USEPA Contract Laboratory Program Inorganic Traffic Report & Chain of Custody Record							Case No: 99999 DAS No: SDG No:												
Date Shipped: 04/09/2001 Carrier Name: FedEx Airbill: 41033427133 Shipped to: Inorganic Lab 555 Clp Street CLP VA 22044 (703) 555-5555			Chain of Custody Record			Sampler Signature: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">Relinquished By</th> <th style="width: 50%;">(Date / Time)</th> </tr> <tr><td>1</td><td></td></tr> <tr><td>2</td><td></td></tr> <tr><td>3</td><td></td></tr> <tr><td>4</td><td></td></tr> </table>		Relinquished By	(Date / Time)	1		2		3		4		For Lab Use Only Lab Contract No: _____ Unit Price: _____ Transfer To: _____ Lab Contract No: _____ Unit Price: _____	
Relinquished By	(Date / Time)																		
1																			
2																			
3																			
4																			
INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt											
MC0103	Sediment/ DAN SAMPLER, BOB SAMPLER	/G	TM (7)	35 (Ice Only) (1)	4	S: 04/09/2001 11:45													
MC0104	Sediment/ DAN SAMPLER	/G	TM (7)	37 (Ice Only) (1)	5	S: 04/09/2001 11:55													
MC0106	Sediment/ DAN SAMPLER	/G	TM (7)	311 (Ice Only) (1)	3	S: 04/09/2001 9:52													
MC0107	Surface Water/ DAN SAMPLER	/G	TM (7)	312 (HNO ₃ , Ice) (1)	1	S: 04/09/2001 10:52 E: 04/09/2001 10:54													
MC0108	Sediment/ JOE SAMPLER	/G	TM (7)	313 (Ice Only) (1)	3	S: 04/09/2001 10:51													
MC0109	Surface Water/ JOHN SAMPLER	/G	TM (7)	329 (HNO ₃ , Ice), 330 (HNO ₃ , Ice), 331 (HNO ₃ , Ice) (3)	14	S: 04/09/2001 13:00													
MC0110	Surface Soil (0"-6")/ BOBBY SAMPLER	/G	TM (7)	335 (Ice Only) (1)	16	S: 04/09/2001 13:00													
MC0111	Surface Water/ JOE SAMPLER	/G	TM (7)	342 (HNO ₃ , Ice) (1)	15	S: 04/09/2001 14:00													
MC0112	Sediment/ JOHN SAMPLER	/G	TM (7)	346 (Ice Only) (1)	17	S: 04/09/2001 14:00													
Shipment for Case Complete? N		Sample(s) to be used for laboratory QC:		Additional Sampler Signature(s):		Cooler Temperature Upon Receipt:		Chain of Custody Seal Number:											
Analysis Key: TM = TAL Total Metals		Concentration: L = Low, M = Low/Medium, H = High		Type/Designate: Composite = C, Grab = G		Custody Seal Intact? ___		Shipment Iced? ___											
TR Number: 3-235781339-040901-0001																			
<small>PR provides preliminary results. Requests for preliminary results will increase analytical costs. Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222</small>																			

LABORATORY COPY
F2V5.0.66 Page 1 of 2

Figure 3-6. An Organic Traffic Report Created Using the FORMS II Lite Software (Regional Copy)

EPA USEPA Contract Laboratory Program Organic Traffic Report & Chain of Custody Record						Case No: 99999 DAS No:		R
Region: 3 Project Code: Account Code: 11112223333 CERCLIS ID: MD-999 Spill ID: Site Name/State: Real Site/MD Project Leader: DAN SAMPLER Action: Expanded Site Investigation/RI Sampling Co: Test Samplers, Inc.			Date Shipped: 04/09/2001 Carrier Name: FedEx Airbill: 41033427144 Shipped to: Organic Lab 999 Route 120 Arlington VA 22044 (999) 555-5555			Chain of Custody Record Relinquished By (Date / Time) Received By (Date / Time)		
						1		
						2		
						3		
						4		
ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	QC Type
C0100	Surface Soil (0"-6")/ DAN SAMPLER	/G	Arochlors (7)	31 (Ice Only) (1)	1	S: 04/09/2001 11:05		—
C0101	Surface Soil (0"-6")/ BOB SAMPLER	/G	Arochlors (7)	32 (Ice Only) (1)	2	S: 04/09/2001 11:20		—
C0102	Surface Soil (0"-6")/ DAN SAMPLER	/G	Arochlors (7)	33 (Ice Only) (1)	3	S: 04/09/2001 11:30		—
C0103	Sediment/ DAN SAMPLER	/G	Arochlors (7)	34 (Ice Only) (1)	4	S: 04/09/2001 11:45		—
C0104	BOB SAMPLER Sediment/ DAN SAMPLER	/G	Arochlors (7)	36 (Ice Only) (1)	5	S: 04/09/2001 11:55		—
C0107	Surface Water/ DAN SAMPLER	/G	Arochlors (7)	3133 (Ice Only), 3134 (Ice Only) (2)	1	S: 04/09/2001 10:52 E: 04/09/2001 10:54		—
C0108	Sediment/ JOE SAMPLER	/G	Arochlors (7)	3135 (Ice Only) (1)	3	S: 04/09/2001 10:51		—
Shipment for Case Complete? N		Sample(s) to be used for laboratory QC: C0109		Additional Sampler Signature(s):			Chain of Custody Seal Number:	
Analysis Key:		Concentration: L = Low, M = Low/Medium, H = High		Type/Designate: Composite = C, Grab = G			Shipment Iced? _____	
Arochlors = Arochlors, BNA = TCL Semivolatiles, VOA = TCL Volatiles								
TR Number: 3-235781339-040901-0002 PR provides preliminary results. Requests for preliminary results will increase analytical costs. Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222								
						REGION COPY F2V5.0.66 Page 1 of 3		

Figure 3-7. An Inorganic Traffic Report Created Using the FORMS II Lite Software (Regional Copy)

USEPA Contract Laboratory Program Inorganic Traffic Report & Chain of Custody Record						Case No: 99999 DAS No:		R	
Region: 3 Project Code: Account Code: 111122223333 CERCLIS ID: MD-999 Spill ID: Site Name/State: Real Site/MD Project Leader: DAN SAMPLER Action: Expanded Site Investigation/RI Sampling Co: Test Samplers, Inc.			Date Shipped: 04/09/2001 Carrier Name: FedEx Airbill: 41033427133 Shipped to: Inorganic Lab 555 Clp Street CLP VA 22044 (703) 555-5555			Chain of Custody Record Relinquished By (Date / Time) Received By (Date / Time)		Sampler Signature: 	
INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	QC Type	
MC0103	Sediment/ DAN SAMPLER	/G	TM (7)	35 (Ice Only) (1)	4	S: 04/09/2001 11:45		—	
MC0104	Sediment/ BOB SAMPLER	/G	TM (7)	37 (Ice Only) (1)	5	S: 04/09/2001 11:55		—	
MC0106	Sediment/ DAN SAMPLER	/G	TM (7)	311 (Ice Only) (1)	3	S: 04/09/2001 9:52		—	
MC0107	Surface Water/ DAN SAMPLER	/G	TM (7)	312 (HNO3, Ice) (1)	1	S: 04/09/2001 10:52 E: 04/09/2001 10:54		—	
MC0108	Sediment/ JOE SAMPLER	/G	TM (7)	313 (Ice Only) (1)	3	S: 04/09/2001 10:51		—	
MC0109	Surface Water/ JOHN SAMPLER	/G	TM (7)	329 (HNO3, Ice), 330 (HNO3, Ice), 331 (HNO3, Ice) (3)	14	S: 04/09/2001 13:00		MS/MD	
MC0110	Surface Soil (0"-6")/ BOBBY SAMPLER	/G	TM (7)	335 (Ice Only) (1)	16	S: 04/09/2001 13:00		—	
MC0111	Surface Water/ JOE SAMPLER	/G	TM (7)	342 (HNO3, Ice) (1)	15	S: 04/09/2001 14:00		—	
MC0112	Sediment/ JOHN SAMPLER	/G	TM (7)	346 (Ice Only) (1)	17	S: 04/09/2001 14:00		—	
Shipment for Case Complete? N		Sample(s) to be used for laboratory QC:			Additional Sampler Signature(s):		Chain of Custody Seal Number:		
Analysis Key:		Concentration: L = Low, M = Low/Medium, H = High			Type/Designate: Composite = C, Grab = G		Shipment Iced? _____		
TM = TAL Total Metals									
TR Number: 3-235781339-040901-0001 PR provides preliminary results. Requests for preliminary results will increase analytical costs. Send Copy to: Contract Laboratory Analytical Services Support, 2000 Edmund Halley Dr., Reston, VA. 20191-3436 Phone 703/264-9348 Fax 703/264-9222									
						REGION COPY F2V5.0.66 Page 1 of 2			

3.2.3 Complete and Attach Custody Seals

Custody seals are usually pre-printed stickers that are signed (or initialed) and dated by the sampler after collection and placed on sample bottles or containers and/or shipping coolers or containers to document who sealed the sample container, and that the sample has not been tampered with. The seals must be placed such that they will break if the sample bottle or container or the shipping cooler or container is tampered with or opened after leaving custody of sampling personnel (see Figure 3-8). Custody seals can also be used to maintain custody of other items such as envelopes containing video tapes of the sample collection process.

Note: Custody seals should never be placed directly onto an EnCore™ container. They must be placed on the EnCore™ bag. Refer to Appendix B for details.


 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY OFFICIAL SAMPLE SEAL	SAMPLE NO.	DATE	SEAL BROKEN BY	DATE
	SIGNATURE			
	PRINT NAME AND TITLE			

Figure 3-8. Custody Seal

Instructions for completing and attaching a custody seal are included in Table 3-8.

Table 3-8. Completing and Attaching a Custody Seal		
Step	Action	Special Notes
1	Record the sample number.	The space for the sample number does not need to be completed on custody seals being placed on the opening of a cooler, only on those being placed on the opening of sample bottles or containers.
2	Record the month, day, and year of sample collection.	
3	Sign the seal in the Signature area.	
4	Print your name and title in the Print Name and Title area.	
5	Place the custody seal over the edge of the sample bottle or container such that it will break if tampered with.	
6	It is recommended that you cover the custody seal with clear plastic tape to protect it.	Take special care to not place the protective tape over the seal in such a way that it can be removed and then re-attached without signs of tampering.

The use and type of custody seals can vary by Region or collecting organization. Sampling personnel should obtain the appropriate custody seals and specific instructions for correctly attaching them for each sampling event from the RSCC.

3.2.4 Complete and Attach Sample Labels

It is recommended that samplers affix sample labels to each sample container. A label generally contains the associated sample number (either written or pre-printed). Samplers may also include additional information such as the station location or the date/time of collection. Per CLP minimum documentation requirements, the sample number must appear on a sample label or be legibly printed on the sample. Samplers should complete the label information if necessary using waterproof ink, place the label on the outside of the sample bottle or container, then cover the label with clear packaging tape to protect the label and maintain legibility (see Figure 3-1).

3.2.5 Complete and Attach Sample Tags

To support use of sample data in potential enforcement actions, samples other than *in situ* measurements (e.g., pH, temperature, conductivity) can be identified with a sample tag. Typically, site-specific information is written on the tags using waterproof ink. The use and type of sample tags may vary by Region. For each sampling event, sampling personnel should receive the required sample tags and type of information to include from the Region/RSCC. Per CLP primary documentation requirements, the sampler must record the sample number on a sample tag. A detailed set of instructions for completing and attaching a sample tag are included in Table 3-9.

Table 3-9. Completing and Attaching a Sample Tag		
Step	Action	Special Notes
1	Under the "Remarks" heading, record the CLP Case number and sample number.	Make sure to record the correct Case and sample number in a legible manner.
2	Record the project code (e.g., contract number, work assignment number, Interagency Agreement number, etc.) assigned by USEPA.	
3	Enter the station number assigned by the sampling team coordinator.	
4	Record the month, day, and year of sample collection.	
5	Enter the military time of sample collection (e.g., 13:01 for 1:01 PM).	
6	Place an "X" in the box next to Yes or No to indicate if a preservative was added to the sample.	
7	Under "Analyses", place an "X" in the box next to the parameters for which the sample is to be analyzed.	
8	Leave the box for "Laboratory Sample Number" blank.	
9	It is recommended that the sample tag be attached to the neck of the sample bottle or container using regular string, stretch string, or wire (see Figure 3-1).	Do NOT use wire to attach a sample tag to a metal sample.

An example of a completed sample tag is included in Figure 3-9 below:

[illegible]

Figure 3-9. Completed Sample Tag

3.3 Sampling Considerations

When performing a sampling event, the sampler is expected to follow prescribed sampling techniques. The sampler should also be aware of any special sampling considerations, contaminant issues, and sample compositing and mixing methods that could affect their sampling efforts.

3.3.1 General Sampling Techniques

This section provides information on guidance documents available for collecting CLP RAS samples. Information regarding surface water, sediment, soil, and groundwater sampling can be found in many documents including, but not limited to, the following sources:

- Compendium of ERT Surface Water and Sediment Sampling Procedures, EPA/540/P-91/005;
- Compendium of ERT Soil Sampling and Surface Geophysics Procedures, EPA/540/P-91/006;
- Compendium of ERT Groundwater Sampling Procedures, EPA/540/P-91/007;
- Quality Assurance Sampling Plan for Environmental Response (QASPER) software, Version 4.1, ERT; and
- Requirements for the Preparation of Sampling and Analysis Plans, US Army Corps of Engineers, February 1, 2001, EM 200-1-3.

These documents, along with appropriate Regional guidance and procedures, should be consulted for detailed sample collection, preservation, handling and storing, equipment decontamination, and Quality Assurance/Quality Control (QA/QC) procedures. When working with potentially hazardous materials, samplers should follow USEPA and Occupational Safety & Health Administration (OSHA) requirements, specific health and safety procedures, and Department of Transportation (DOT) requirements.

3.3.2 Special Sampling Considerations

The following sections provides general guidance for VOA, low concentration contaminant, duplicate, and split sample collection, along with procedures for compositing and mixing. The guidance provided in these sections may be useful and appropriate for the collection of CLP RAS samples.

Samplers should refer to Regionally-developed SOPs to obtain specific procedures for properly collecting and preserving samples in the field. For additional guidance regarding sampling for volatiles in soil and water, see Appendices B and C. Refer to Appendix D for hexavalent chromium sampling guidance.

Samplers should obtain Regional guidance when testing and ameliorating for:

- Carbonates in VOA soil and water;
- Residual chlorine in VOA soil and water or cyanide;
- Oxidants in VOA soil and water; or
- Sulfides in cyanide.

3.3.3 Contaminant Sampling

Certain compounds can be detected in the parts-per-billion (ppb) and/or parts-per-trillion (ppt) range. Extreme care **MUST** be taken to prevent cross-contamination of these samples. The following precautions should be taken when trace contaminants are a concern:

- Disposable gloves should be worn each time a different location is sampled.
- When collecting both surface water and sediments, surface water samples should be collected first. This reduces the chance of sediment dispersal into surface water, and the resulting loss of surface water sample integrity.
- Sampling should occur in a progression from the least to the most contaminated area, if this information is known to the sampling team.
- Samplers should use equipment constructed of Teflon, stainless steel, or glass that has been properly pre-cleaned for collection of samples for trace organic and/or inorganic analyses. Equipment constructed of plastic or polyvinyl chloride (PVC) should NOT be used to collect samples for trace organic compound analyses.

3.3.4 Sample Compositing

Samples for VOA analysis should not be composited to minimize loss of volatile analytes. Sample compositing is a site-specific activity that must be conducted according to your Sampling Analysis Plan (SAP). Compositing is typically used for large sites under investigation to improve the precision (i.e., lower the variance) of the estimated average contaminant concentrations.

Composite samples consist of a series of discrete grab samples that are mixed together to characterize the average composition of a given material. The discrete samples are usually of equal volume, but may be weighted to reflect an increased flow or volume.

Regardless, all discrete samples must be collected in an identical manner and the number of grab samples forming a composite should be consistent.

There are several compositing techniques you could be required to use such as:

- Flow-proportioned – Collected proportional to the flow rate during the compositing period by either a time-varying/constant volume or a time-constant/varying volume method. This technique is usually associated with wastewater or storm water runoff sampling.
- Time – Composed of a varying number of discrete samples collected at equal time intervals during the compositing period. This technique is typically used to sample wastewater and streams, and in some air sampling applications.
- Areal – Collected from individual grab samples collected in an area or on a cross-sectional basis. Areal composites are comprised of equal volumes of grab samples where all grabs are collected in an identical manner. This technique is typically used for estimating average contaminant concentrations in soils or sediments, and is useful when contaminants are present in nugget form (i.e., TNT chunks, lead shot, etc.), thus exhibiting large differences in concentration over a small sample area.
- Vertical – Collected from individual grab samples but taken from a vertical cross section. Vertical composites are comprised of equal volumes of grab samples where all grab samples are collected in an identical manner. Examples would include vertical profiles of a soil borehole or sediment columns.
- Volume – Collected from discrete samples whose aliquot volumes are proportional to the volume of sampled material. Volume composites are usually associated with hazardous waste bulking operations where the sample represents combined or bulked waste.

When compositing solid samples (i.e., sediment, soil, or sludge) for analysis of compounds present in trace quantities, a stainless steel or Teflon bowl and spatula should be used.

3.3.5 Sample Mixing and Homogenizing

Samples for VOA analysis should not be mixed to minimize loss of volatile analytes. Mixing of the sample for the remaining parameters is necessary to create a representative sample media. It is extremely important that solid samples be mixed as thoroughly as possible to ensure that the sample is as representative as possible of the sample location. Please refer to the project-specific SAP regarding instructions on removal of any extraneous materials (e.g., leaves, sticks, rocks, etc.). The mixing technique will depend on the physical characteristics of the solid material (e.g., particle size, moisture content, etc.). The mixing container should be large enough to hold the sample volume and accommodate the procedures without spilling. Both the mixing container (generally a bowl or tray) and the mixing implement should be properly decontaminated before use.

Table 3-10 provides a short procedure for mixing a soil sample with a small particle size (less than 1/4 in) in the field and filling sample containers.

Table 3-10. Mixing a Sample and Filling Sample Containers

Step	Action
1	Roll the contents of the compositing container to the middle of the container and mix.
2	Quarter the sample and move to the sides of the container.
3	Mix each quarter individually, then combine and mix OPPOSITE quarters, then roll to the middle of the container.
4	Mix the sample once more, then quarter the sample again.
5	Mix each quarter individually, then combine and mix ADJACENT corners, then roll to the middle of the container. The goal is to achieve a consistent physical appearance before sample containers are filled.
6	Flatten piled material into an oblong shape.
7	Using a flat-bottomed scoop, collect a strip of soil across the entire width of the short axis and place it into a sample container.
8	Repeat Step 8 at evenly-spaced intervals until the sample containers are filled.
9	Record the approximate quantity of each subsample in the field log book.

3.4 Pack and Ship Samples

Once the samples have been taken, it is very important that the sampler properly package the samples for shipment and ensure that the samples are sent to the appropriate laboratory as quickly as possible. Doing so will:

- Achieve acceptance or performance criteria (i.e., acceptance or performance criteria such as detection limits) by collecting sufficient sample volumes for each method;
- Protect the integrity of samples from changes in composition or concentration caused by bacterial growth or degradation from increased temperatures;
- Reduce the chance of leaking or breaking of sample containers that would result in loss of sample, loss of sample integrity, and exposure of personnel to toxic substances; and
- Help ensure compliance with shipping regulations.

3.4.1 Sample Containers

Once samples are collected, they must be stored in conditions that maintain sample integrity. All samples should be placed in shipping containers or other suitable containers with ice to reduce the temperature as soon as possible after collection. Ideally, all samples should be shipped the day of collection for overnight delivery to the laboratory. If samples cannot be shipped on the day of collection, the sample temperature should be maintained at 4°C or less until they are shipped to the laboratory.

One CLP RAS sample may be contained in several bottles and vials. For example, under the Low/Medium Organic CLP RAS, one water sample might consist of all containers needed for the three analytical fractions available under this service (i.e., volatile fraction, semi-volatile fraction, and Pesticide/Aroclor fraction), even though the fractions will be collected in separate containers. Therefore, the analysis to be performed, the matrix type, and the expected concentration level (low/medium or high level) will determine the type

of container that will be used as well as the volume that must be collected for that particular sample fraction.

3.4.2 Inventory of Samples and Documentation

Prior to shipment, sampling personnel should conduct an inventory of the contents of the shipping cooler or container against the corresponding TR when packing them for shipment to laboratories. An inventory will ensure that the proper number of containers have been collected for each analysis of the samples, that the required PE and QC samples and cooler temperature blanks are included, and the correct sample numbers and fractions have been assigned to each sample.

3.4.3 Follow Shipping Regulations

Sample shipping personnel are legally responsible for ensuring that the sample shipment will comply with all applicable shipping regulations. For example, hazardous material samples must be packaged, labeled, and shipped in compliance with all International Air Transport Association (IATA) Dangerous Goods regulations or US Department of Transportation (US DOT) regulations and USEPA guidelines.

Refer to Appendix B for detailed guidelines when using Method 5035 to preserve and ship samples.

3.4.4 Package Samples for Shipment

Sampling personnel are responsible for the proper packaging of samples for shipment. To ensure that samples are appropriately packaged (e.g., to avoid breakage and/or contamination) the sampler should consult their respective project plans to determine the proper packing and shipping procedures. The sampler must determine the sample type, pack the shipping containers correctly, include necessary paperwork, label and seal shipping containers or coolers, and ship the samples.

3.4.4.1 Determine the Sample Type and Container

Sampling personnel should know what kinds of samples they are handling to ensure proper packaging. For example, medium and high concentration level soil samples or samples known to contain dioxin must be sealed in metal containers. Samplers should refer to their appropriate project plans to determine which type of sample container should be used for each type of sample being taken during the sampling event.

3.4.4.2 Pack Shipping Containers

It is imperative that samples are correctly and carefully packed in shipping containers to prevent the sample containers from breaking or leaking. Samplers must prepare and pack a shipping cooler or container according to the instructions outlined in Table 3-11.

Table 3-11. Packing Samples for Shipment

Step	Action	Special Notes
1	Seal all drain holes, both inside and out, to prevent leakage in the event of sample breakage.	
2	Check all lids/caps to make sure they are tightly sealed and will not leak.	
3	Seal samples within a clear plastic bag.	
4	Fully chill samples to 4°C or less prior to placement within suitable packing materials.	
5	Prior to placing samples within the shipping cooler, it is recommended that samplers line shipping containers with non-combustible, absorbent packing material such as rock wool, ground corn cobs, perlite, or clay-based absorbents (e.g., kitty litter or 'oil dry').	NEVER use earth, loose ice, paper, or styrofoam to pack samples, and avoid using vermiculite unless shipping hazardous materials as it can contain asbestos. If using vermiculite, the manufacturer <u>must</u> be able to document that it is asbestos-free, and the sampler <u>must</u> document this information with their Regional Safety Office.
6	Place samples in CLEAN, sealed, watertight shipping containers (metal or hard plastic cooler).	
7	Conduct an inventory of the contents of the shipping cooler/container against the corresponding TR.	
8	Cover samples in double-bagged ice to prevent water damage to packing materials.	Do NOT pour loose ice directly into the sample cooler. The ice will maintain the temperature of the samples within the shipping cooler.
9	It is recommended that samplers include a temperature blank within each cooler being shipped.	The temperature blank is generally a 40 mL vial filled with water and labeled "temperature blank".

3.4.4.3 Include Necessary Paperwork

Sampling personnel must properly place the required paperwork in the shipping cooler. For example, TRs should be placed in a plastic bag or pouch and then secured to the underside of the shipping cooler lids (see Figure 3-10).

3.4.4.4 Return Sample Shipping Coolers

CLP Laboratories must routinely return sample shipping coolers within 14 calendar days following shipment receipt. Therefore, the sampler should also include cooler return instructions with each shipment. The sampler (not the CLP laboratory) is responsible for paying for return of the cooler and should also include shipping airbills bearing the sampler's account number, as well as a return address to allow for cooler return.

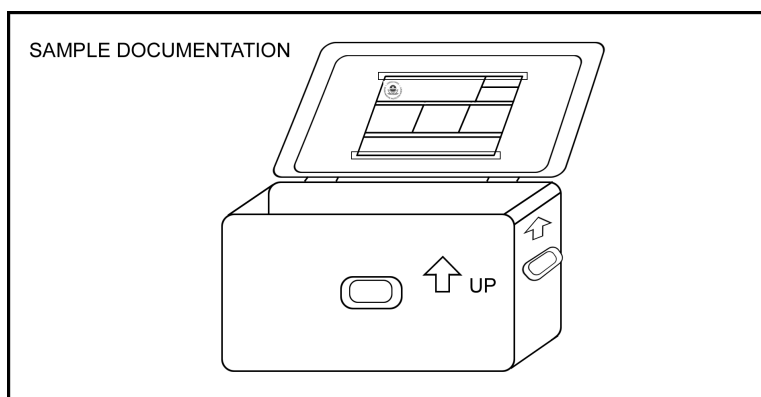


Figure 3-10. Sample Cooler with Attached TR and Cooler Return Documentation

3.4.4.5 Label and Seal Sample Shipping Coolers

After samples are packaged within shipping coolers, sampling personnel should carefully secure the top and bottom of the coolers with tape, place return address labels clearly on the outside of the cooler, and attach the correct Chain-of-Custody seals, if required (see Figure 3-11).

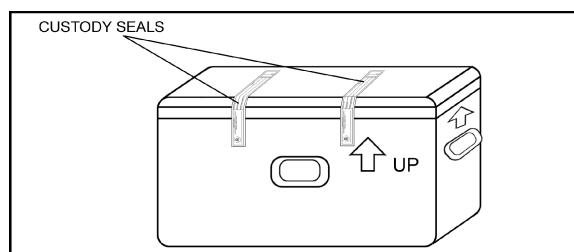


Figure 3-11. Shipping Cooler with Custody Seals

If more than one cooler is being delivered to a laboratory, samplers should mark each cooler as "1 of 2", "2 of 2", etc. In addition, sampling personnel must accurately complete and attach shipping airbill paperwork for shipment of the samples to the laboratory. An airbill should be completed for each cooler shipped and when addressing the airbill, the recipient should be identified as the Sample Custodian. Sampling personnel should receive the correct name, address, and telephone number of the laboratory to which they must ship samples from the Region/RSCC. To avoid delays in analytical testing, sampling personnel should make sure they are sending the correct types of samples to the correct laboratory when collecting samples for multiple types of analysis. For example, inorganic samples may be shipped to one laboratory for analysis, while organic samples may need to be shipped to another laboratory.

3.4.4.6 Ship Samples

The sampling contractor should ensure that sampling personnel know the shipping company's name, address, and telephone number. In addition, they should be aware of the shipping company's hours of operation, shipping schedule, and pick-up/drop-off requirements.

Overnight Delivery

It is imperative that samples be sent via overnight delivery. Delays caused by longer shipment times may cause holding times to expire, which in turn may destroy sample integrity or require the re-collection of samples for analysis.

Saturday Delivery

If shipping samples for Saturday delivery, the sampler **MUST** contact CLP SMO by 3:00 PM EST on the Friday prior to delivery.

3.4.5 Provide Shipment Notification

When samples are shipped to CLP Laboratories, sampling personnel **must immediately** report all sample shipments to CLP SMO. If sampling personnel are shipping samples after 5:00 PM EST, they must notify CLP SMO by 8:00 AM on the following business day. Sampling personnel should receive the name and phone number of the appropriate CLP SMO coordinator to contact from the Region/RSCC.

Samplers must provide the following information to CLP SMO:

- Name and phone number at which they can easily be reached (preferably closest on-site phone number if still in the field);
- Case number (see Section 2.4.1);
- Number, concentration, matrix and analysis of samples being shipped;
- Name of laboratory (or laboratories) to which the samples were shipped;
- Airbill number(s);
- Date of shipment;
- Case status (i.e., whether or not the Case is complete);
- Problems encountered, special comments, or any unanticipated issues;
- When to expect the next anticipated shipment; and
- The pink copy of the TR (must be sent within five days of sample shipment).

Note: For Saturday delivery, samplers **MUST** contact CLP SMO by 3:00 PM EST on the Friday prior to delivery.

Samplers should also be aware if their Region requires them to notify the RSCC or their designee of sample shipment.